CLAIMS:

1. A rotary hydraulic machine having a housing including a casing, a rotary group located within said casing and including barrel rotatable in said housing and having a plurality of pistons axially slideable in cylinders in said barrel, and a swashplate assembly to engage said pistons and induce reciprocation thereof as said barrel rotates to transfer fluid between a pair of ports, an actuator acting upon said swashplate to adjust the disposition thereof relative to said barrel and thereby adjust the stroke of said pistons in said barrel, and a valve to control flow to said actuator in response to control signals obtained from a control circuit having at least one sensed input thereto indicative of a parameter of said rotating group, said control circuit being located in a control housing secured to said casing and having an inwardly directed surface extending across an aperture in said casing to seal said aperture, a sensor assembly located on said surface and operatively associated with said rotating group to sense said parameter.
2. A machine according to claim 1 wherein said parameter is the rotation of said barrel.
3. A machine according to claim 2 wherein said barrel includes a magnetic element to provide a time varying signal as said barrel rotates past said sensor which is responsive to variations in a magnetic field to sense rotation of said barrel.
4. A machine according to claim 3 wherein said sensor is a Hall effect sensor and said magnetic element is a toothed ring secured (or integral) to said barrel.
5. A machine according to claim 4 wherein said sensor is located in a bore in said surface and electrical leads extend from said sensor into said control housing.
6. A machine according to claim 1 wherein said control circuit receives a signal indicative of pressure of fluid in one of said ports.
7. A machine according to claim 1 wherein said control circuit receives a signal indicative of temperature of fluid in one of said ports.
8. A machine according to claim 1 wherein said sensor is responsive to changes in the disposition of said swashplate in said casing.

9. A machine according to claim 8 wherein a member cooperates with said swashplate to be moveable relative to said surface upon adjustment of said swashplate and said sensor is responsive to variations in a magnetic field induced by movement of said member.
10. A machine according to claim 9 wherein said sensor is located in a bore in said surface and electrical leads extend from said sensor through said bore and into said control housing.
11. A machine according to claim 10 wherein said member is slidably supported in said control housing and extends therefrom into engagement with said swashplate assembly.
12. A machine according to claim 11 wherein said sensor is a Hall effect sensor.
13. A machine according to claim 11 wherein said member is a pin engagable with said swashplate assembly at a location eccentric to its axis of rotation and slidable in a bore in said control housing, said pin carrying a magnet at a location adjacent to said sensor such that movement of said pin in said bore provides a varying magnetic field to said sensor.
14. A machine according to claim 8 wherein said control circuit receives a signal indicative of pressure of fluid in one of said parts.
15. A machine according to claim 8 wherein said control circuit receives a signal indicative of temperature of fluid in one of said parts.
16. A machine according to claim 1 wherein said valve is located in said control housing.
17. A machine according to claim 16 wherein said valve includes an electrically controlled operator and a spool moveable by said operator, said spool being located within a valve cage within a bore in said housing and communicating through internal passages with said actuator.
18. A machine according to claim 17 wherein said operator is connected to said control circuit within said control housing.
19. A machine according to claim 16 wherein a hydraulic accumulator is located in said control housing and is in hydraulic communication with said valve in parallel with the system pressure port to supply pressure thereto.
20. A machine according to claim 19 wherein said accumulator is formed by a cylindrical bore in said control housing and a displacable piston slidable within said cylindrical bore against a spring element.

21. A machine according to claim 20 wherein a stop limits movement of said displacable piston within said cylindrical bore to limit the force applied by said spring against said displacable piston.

22. A machine according to claim 19 wherein said control housing includes a base and an upstanding peripheral skirt, said base being delimited by said surface and said skirt including said bores for said valve and said accumulator.

23. A machine according to claim 22 wherein said control circuit is located within a cavity defined by said skirt and said base.

24. A machine according to claim 23 wherein said control circuit receives a signal indicative of pressure of fluid in one of said parts.

25. A machine according to claim 23 wherein said control circuit receives a signal indicative of temperature of fluid in one of said parts.